Thank you for purchasing the Z2. Your new Zipper e-bike is made with a high carbon steel frame, making it light yet durable, and comes with a lithium battery pre-installed, which has a range of up to 40km on a single charge. The Z2 was designed for inner city commuting, built with comfort and style in mind.

This e-bike features a smart pedal assist system; when you do the pedalling the electric motor works with you to add more power to the wheels, make travelling much easier. You can also use your electric bike like a simple scooter, without pedalling just twist the throttle to go. The brakes are pretty clever too, not only do they act like a normal mechanical bicycle brake, but they will cut power to the motor when applied, making sure you get the most distance out of your battery life.

With a Zipper e-bike you're in control, whether you want to go for a long bike ride and only want help on those difficult hills, or if you just need a 10 minute blast to work, with your Zipper you'll be able to select just what you need. The folding mechanism allows you to quickly store your bike with ease once you reach your destination, which means no more disassembling your bicycle and carrying the wheels around.

> We cannot guarantee the performance of our couriers, if you receive a Zipper e-bike which was damaged in transit, please take a picture before assembly and send it to our email address support@zipperbikes.com before use and we'll send the replacement part.

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Specifications

Brand	Zipper	Model	Z2
Bike Specification			
Tyre Size	20 inch	Weight	21kg
Size	1550×180×1170	Folding Size	800×300×580
Length×Width×Height（mm）		Length×Width×Height（mm）	
Front And Rear Tyre Centre Distance（mm）	990	Frame	High Carbon Steel
Max Load	90kg	Max Peed	25km/h
Motor Specification			
Motor Type	Brushless	Motor	36V250W
Rated Speed	280 RPM	Rated Output Speed	7.5 N.m
Controller Specification			
Cut-Off Voltage	30±1V	Burst Discharge Current	13±1A
Charger Specification			
Input Voltage	AC110-240V 0.8A 50-60HZ		
Charging Voltage And Current	DC42.0V 2A		
Battery & PAS Range			
Battery	Model	Pas Range	Operating Tem
36V 9AH	PAS And Motor	20-40km	-10℃~+50℃

User Guide

As with all bicycles, a Zipper e-bike must be used and maintained properly in order to function correctly. Please read this manual carefully, as it contains vital safety information to ensure the continued performance of the bike. If you have any queries, please feel free to contact our customer service department.

Before Using Your Bike

1. Please charge the battery and pump the tyres before usage!

2. Please observe national laws and local travel regulations, violations of which are not the responsibility of Zipper Bikes.

3. Our products are constantly being updated and changed therefore specifications may change slightly from those listed in this manual.

4. Please operate your bike according to the instructions. Any damage, malfunction, loss or fault caused by misuse is not the responsibility of Zipper Bikes and will void the warranty.

5. Unless permitted by Zipper Bikes or an approved distributor, you may not change the original configuration of the bike; doing so will void the warranty.

6. The rights of interpretation of these statements are owned by Zipper Bikes.

Important Information

1. An electric bike should only be used by children with adult supervision.

2. Please do not touch the battery or battery cables and the metal of the bike at the same time, as this may cause a burst of discharge current which may cause harm or damage to the bike.

3. Static starting, riding uphill or against the wind, operating over the maximum load and low tyre pressure will increase battery consumption and decrease the range. If you want to get the best range possible (1) Pedal more. (2) Reduce unnecessary braking and starting. (3) Avoid overloading. (4) Check the tyre pressure frequently.

4. Leaving the battery empty for a long time may damage the lifetime of the battery. After riding please charge the battery, if you do not use the battery for a long time please charge the battery to the half saturation state for 36-39V, and take out the key. It is recommended that, you should use the bike at every 1-2 months.

5. Please avoid excessive exposure of the e-bike to the sun and rain, such as leaving the bicycle outside. In order to avoid electroplating of the parts and paint corruption, please do not expose to high temperatures.

6. Please check the braking performance regularly, and do not pour oil into the braking mechanism. Take extra caution when cycling in snow or minus temperatures, as braking distances will be greatly increased.

7. Before using your bike please check the all parts, to ensure that everything is tight and intact, to avoid damage or injury.

8. The lithium battery will not cause environmental pollution, but for the sake of safety, please do not throw away batteries, take your old battery to a battery recycling centre.

9. Do not leave the battery near high temperatures, and when charging please keep clear of flammable items, if you remove the battery to charge it, please place it on a non flammable surface.

10. Please pay special attention where you see the below safety sign, as these items may be hot or cause a shock.

Riding Precautions

1. Please don't use the throttle from stationary, as this will use a lot of battery power. Pedalling for around 3-5 cycles should be sufficient, to avoid wasting the power and also protect the battery and motor. You will feel the motor start automatically and then you can use the right hand throttle to increase or decrease assistance.

2. This e-bike can be exposed to light rain and snow, but cannot wade into water. Submerging the motor hub will cause the bike to stop and may cause damage.

3. Please do not exceed the maximum load, for example carrying passengers or heavy objects.

4. Please practice riding your bike in a safe area before riding it on a road.

5. On the road, never undertake a vehicle as it may not see you, and turn left into your path. Please pay particular attention to busses and large vehicles, as it is difficult for raised cabins to see cyclists.

6. Turn off the power using the key when stopped, to conserve power.

8. When pushing the bike, remember to always turn off the power switch to avoid accidently rolling the throttle handle, causing the e-bike to start suddenly.

9. All e-bikes should only be stored indoors.

When Braking

Loosen the throttle and use the brake only; apply the back brake first and then front. If you need to brake urgently, please use both the front and back brake at the same time.

Folding Lock Mechanism

Ensure the latch is tightly locked in place before riding.

Rear Wheel Disabler

Located at the back of the bike is the wheel disabler, this has been designed to prevent the wheel from moving when locked, which will foil people who attempt to steal the e-bike.

Assembling Your E-Bike

Adjusting The Front Braking System

Check the right hand braking handle, there should be full brake pressure when the lever is pressed halfway. If the clearance spacing is different on the left and right pads, you can adjust the adjusting screws on each brake arm until the distance of the two clearances are the same. Loosen the spring tension adjusting screw, then tighten or loosen the brake cable to make the clearances between the brake pad and the wheel rim to be approximately 1.5-2mm. Tighten the tension screw when the clearances of the right-hand-side and left-hand-side pads are equal.

Adjusting The Rear Braking System

Check the left brake lever the same way as checking the right brake lever, adjusting the adjustment screw as needed. If this does not work, loosen the nut of the brake cable anchor bolt, then loosen or tighten the cable until the proper tension is reached. If this still does not work, you can adjust the clearance fine adjustment screw, and keep the clearance of the internal brake pad the same. Adjust these parts until the rear brake works correctly.

Adjusting The Front V-Brake Pad

Adjust one side first and then adjust the other. Please make sure the clearances between the brake pad and the wheel rim is approximately the same on both sides, the optimal clearance width is around 1.5mm. Tighten the nut after you have finished adjusting.

Installing The Front Wheel

Rest the front fork on the hub axle. Use the included washers and nuts to tighten the wheel to the bike. Please note the unique shape of the washers, the latch must be inserted into the hole on the fork, before tightening. If you replace the wheels, please tighten the nuts according to the recommended torque; the rear wheel torque should be no less than 30Nm while the front wheel torque should be no less than 18Nm.

Installing the Handlebars

First lock the folding handlebar tube in place, then insert the steering tube of the handlebars, stand in front of the e-bike and keep the front wheel between your legs, hold the handle bar with both hands tightly, and then adjust the handle bar angle preferably so that the handles are at a right-angle with the handlebar tube, the height of the handlebars should be adjusted to your personal size and preference. Please do not extend the handlebar height over the maximum limit line. Once the angle and height are correct be sure to correctly tighten the nut at the top of the handlebar tube and close the latch firmly.

Installing the Seat/Saddle

Insert the seat post to your personal size and preference, please do not extend the seat post height over the maximum limit line, and then firmly tighten the seat post clamp with quick release.

Adjusting The Chain

Release the rear hub nut and adjust the position of the hub to adjust the chain tension (the chain slack should be 10~15mm), align the chain wheel with the rear sprocket so that they are in the same straight line, and then tighten the rear hub nut. Rotate the crank set counter-clockwise, the chain should have the appropriate tension and run smoothly.

Installing The Pedals

Normally the pedals are marked with an “L” for left or an “R” for right, if they are not marked then they can be used on either side. Please install accordingly, otherwise the crank arm can be damaged.

Installing The Front Mudguard

The headlamp comes pre-installed, however to attach the mudguard this must be loosened. Remove the nut on the back of the head tube, pass the mudguard over the tyre and hook the latch onto the bolt, then retighten the nut, both the headlamp and mudguard should now be in place. The mudguard spokes attach to the front fork, and are tightened into place by using the included washer and bolts onto the front wheel hub.

Charging The Battery

This e-bike comes with a built-in battery, to ensure that the power will not cut out unexpectedly. Please read the following page on maintenance carefully, this e-bike is not a toy.

Maintenance

Charger

1. Do not use the charger in places of heat, excessive smoke and dust, moisture and direct sunlight.
2. When charging, please keep the charger in a well ventilated room.
3. Do not allow any liquid near the charger and do not insert any metal items.
4. Do not drop, impact or try to dismantle the charger.
5. Do not attempt to repair a broken charger yourself, charger replacements are available to purchase.
6. Do not leave a battery charging unattended, charging should be done while supervised and away from valuables, pets, children and flammable items.

Power Display

Your Zipper bike has a built in battery indicator on the handlebars, when the battery is full all five LEDs should light, and when the indicator shows only two LEDS lit then the battery needs to be charged. Sometimes the lights may flicker or turn off and on which is normal.

Charging Procedure

1. Only use the supplied charger, and double check to make sure the output of your charger matches your battery.
2. When charging, connect the battery to the charger first and then plug the charger into the mains.
3. When charging, the power indicator light is red to indicate the battery is still charging. When the battery is fully charged (3-6 hours), the charging indicator lights will change from red to blue or green, and the charger should be unplugged soon after. Charging time should generally never exceed 8 hours. IMPORTANT - NEVER LEAVE A BATTERY CHARGING OVERNIGHT UNATTENDED.
4. After charging, you should pull the charger plug out of the mains and then disconnect the battery from the charger. If you only wish to partially charge the battery for storage charging time should be reduced accordingly.
5. If you smell burning during the charging process of the battery or the charger gets very hot please immediately stop charging, and contact our customer service department or your local dealer for advice.

Battery

1. Please fully charge the battery before first use as described above.
2. Please only use the supplied or designated chargers. Otherwise damage may occur to the battery and other related accessories, which could result in an accident. Any damage, loss or fault arising from incorrect charging procedure or from using the wrong charger will be borne by the purchaser.
3. The battery can be charged while inside the bike. Some models can also be removed from the bike for charging. The battery will need using (cycled) around 8-10 times before it reaches optimum performance and capacity.
4. Be careful that the metal ports at the end of the battery box or connecting leads do not touch any other metal as this can cause a short circuit, particular attention should be made with folding bikes.
5. Do not drop, impact or try to dismantle the battery.
6. Do not use the battery for long periods of time under sun exposure or hot temperatures. If you don't use your electric bike for a long period of time, please charge it every two months, charging to half capacity is considered efficient.
7. Ensure water does not enter the batteries charging port.
8. When discarding unwanted batteries, first discharge the battery to zero voltage. Never put into a fire!

Mechanical Parts

1. Fastening components:
    1.1. The handlebar, head tube and saddle tube must be locked with 18Nm torque.
    1.2. Locking force of 15-17 KGF is required on quick disassembly parts.
    1.3. The front wheel nut locking torque needs to reach 18Nm, and the rear needs to reach 30Nm.
2. Lubrication: The chain, flywheel and headsets need regular maintenance. Drop a little oil onto the chain, and apply drops every month.
3. Adjust the rear ends of the chain. Loosen the nut, adjust the rear wheels front and rear position as needed to achieve the chains proper tightness, the middle position of the chain if pushed down with your finger should only drop 10-15mm.
4. Pay attention to the front and rear brake blocks, if worn they should be promptly replaced, to avoid loss of braking and wearing the aluminium ring.

Cleaning & Regular Maintenance

Clean using a soft cloth. Do not apply water directly to rear drum brake, motor and hubs to avoid performance drop or shortening of life expectancy. Do not use steam, a hose pipe or high-pressure water gun to clean.

Maintenance Schedule	Daily	60 Days	180 Days
1.1 Before each ride, check whether tyre pressure is appropriate. Normally, the pressure is 125KPa for front wheel and 175KPa for the rear wheel. 1.2 Any cracking or abnormal wear on the tyres. 1.3 Any nails, stones or glass stuck inside the tyres.	○	○/▲	○/▲
2. Brakes work normally?	○	▲	▲
3. Any damage on the charger and power cable?	○		
4. Front and rear hub nut tightened? Throttle and turning mechanism parts loose or worn?		○/▲	○/▲
5. Brake pads worn?		▲	▲
6. For folding E-Bikes, check locking mechanism is secured.	○		
7. Chain drive mechanism.		▽	▽
8. Crank arm worn out? Smooth rotation?		○/▽	○/▽
9. Wheel spokes loose or broken?		○/▲	○/▲

○ = **Check** ▲ = **Adjust/Replace** ▽ = **Lubricating**

Troubleshooting

Problem	No.	Analysis	Solution
No power after turning the power key including no lights etc	1	Electric lock is damaged	Replace multifunction throttle
	2	Line conductor is broken	Repair or replace line
	3	Battery problem	Check battery with voltmeter and ensure battery is charged. If no power from battery replace.
No motor power after turning the key but lights etc are still working.	1	Battery under voltage protection level	Charge the battery
	2	Throttle is broken/line conductor is abnormal	Replace throttle / repair line conductor
	3	Right and left brake is broken	Replace right and left brake
	4	Controller and motor is broken or line conductor is abnormal	Replace controller and motor, maintain the line conductor
Range is low	1	Battery voltage is too low/not charged enough.	Charge the battery fully until charger lights turn blue or green. If still a problem battery has been charged incorrectly and needs replacing.
	2	Tyre pressure is not enough	Blow up the tyres
	3	When braking, uninterrupted power	Replace the brake, maintain the line conductor
	4	Mechanical parts turn badly and Cause resistance	Maintain the bad parts, replace the fault worn parts
	5	More uphill, drive against wind, frequent braking, overloading	Correct bad drive mode, read our best driving practices guide.
	6	Battery is too old and broken	Replace with the same model battery
Power indicator light displays normal but when driven with assistance the motor supplies no power	1	Pedal position the PAS assistance is off normal	Adjust the PAS assistance, have no deviation and loosening phenomenon
Charging the battery shows abnormal, the charger's indicator light is flashing, and the battery can't be charged	1	Charger into state of burst discharge	Check battery charge loop if it has short circuit phenomenon
	2	Charger is broken	Replace with a new model charger that is the same
	3	Charger is not connected, socket is damaged	Reconnect the charger with new socket